NOTES ON *PROTOGLOSSUM* (FUNGI: CORTINARIALES)

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ABSTRACT

May, Tom. W. Notes on *Protoglossum* (Fungi: Cortinariales). **Muelleria 8(3): 287–289 (1995).** — The genus *Cortinomyces* Bougher & Castellano is superfluous and the species included therein should be placed in *Protoglossum* Massee. *C. effodiendus* (G.Cunn.) Bougher & Castellano is shown to be a synonym of *P. luteum* Massee.

INTRODUCTION

Bougher & Castellano (1993) introduced four new genera to accommodate mostly Australian species previously referred to *Hymenogaster* Vittad. Whilst the recognition of segregate genera is warranted, one of the new genera, *Cortinomyces* Bougher & Castellano, is illegitimate because its designated type (*Protoglossum luteum* Massee) is also the type of the earlier valid genus *Protoglossum* Massee. There is no doubt that *P. luteum* is the type of *Protoglossum* because it was the only species dealt with by Massee (1891) when he first described the genus. *Cortinomyces* is thus an obligate synonym of *Protoglossum*. Bougher & Castellano (1993) place seven species in *Cortinomyces*. The correct name for *Cortinomyces luteus* (Massee) Bougher & Castellano is *P. luteum*, *C. effodiendus* (G.Cunn.) Bougher & Castellano is treated here as a synonym of *P. luteum*, and new combinations in *Protoglossum* are proposed below for the other five species.

METHODS

Colour notations are from Munsell (1975; 1977). Observations on spores were made on small pieces of the tramal plates mounted in 3% KOH. Spore dimensions include neither ornamentation nor the hilar appendage. Q is the quotient of the length and the width of an individual spore.

NEW COMBINATIONS IN *PROTOGLOSSUM*

Protoglossum Massee, *Grevillea* **19**: 97 (1891) Type: *P. luteum* Massee [only species].

Cortinomyces Bougher & Castellano, *Mycologia* **85**: 277 (1993) *nom. superfl.* Type: *P. luteum* Massee [by designation].

1. Protoglossum cribbiae (A.H.Sm.) T.W.May *comb. nov.*

Basionym: *Hymenogaster cribbiae* A.H.Sm., *Mycologia* **58**: 105 (1966) *nom. nov.* for *Gymnoglossum viscidum* J.W.Cribb non *H. viscidus* (Massee & Rodway) C.W.Dodge & Zeller (1934).

Cortinomyces cribbiae (A.H.Sm.) Bougher & Castellano *Mycologia* **85**: 279 (1993).

Gymnoglossum viscidum J.W.Cribb, *Pap. Dept. Bot. Univ. Queensland* **3**: 158 (1958).

2. Protoglossum niveum (Vittad.) T.W.May *comb. nov.*

Basionym: *Hymenogaster niveus* Vittad., *Monogr. Tuberac.* 24 (1831) [not seen, citation from Bougher & Castellano (1993)].

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Cortinomyces niveus (Vittad.) Bougher & Castellano, *Mycologia* **85**: 280 (1993) [as '(Cribb) Bougher & Castellano'].

3. Protoglossum purpureum (J.W.Cribb) T.W.May *comb. nov.*
BASIONYM: *Hymenogaster purpureus* J.W.Cribb, *Pap. Dept. Bot. Univ. Queensland* **3**: 127 (1956).
Cortinomyces purpureus (J.W.Cribb) Bougher & Castellano, *Mycologia* **85**: 280 (1993).

4. Protoglossum violaceum (Massee & Rodway) T.W.May *comb. nov.*
BASIONYM: *Hymenogaster violaceus* Massee & Rodway, in Massee, *Bull. Misc. Inform.* **1898**: 127 (1898).
Arcangeliella violacea (Massee & Rodway) C.W.Dodge, *Compar. Morph. Fungi* 487 (1928).
Dendrogaster violaceus (Massee & Rodway) G.Cunn., *Proc. Linn. Soc. New South Wales* **59**: 172 (1934).
Gymnoglossum violaceum (Massee & Rodway) G.Cunn., *New Zealand J. Sci. Technol.*, sect. B, **22**: 300 (1941).
Cortinomyces violaceus (Massee & Rodway) Bougher & Castellano, *Mycologia* **85**: 280 (1993).

5. Protoglossum viscidum (Massee & Rodway) T.W.May *comb. nov.*
BASIONYM: *Hysterangium viscidum* Massee & Rodway, in Massee, *Bull. Misc. Inform.* **1898**: 127 (1898).
Hymenogaster viscidus (Massee & Rodway) C.W.Dodge & Zeller, *Ann. Missouri Bot. Gard.* **21**: 642 (1934).
Cortinomyces viscidus (Massee & Rodway) Bougher & Castellano, *Mycologia* **85**: 280 (1993).

PROTOGLOSSUM LUTEUM AND *HYMENOGASTER EFFODIENDUS*

6. Protoglossum luteum Massee, *Grevillea* **19**: 97 (1891).
Hymenogaster luteus (Massee) G.Cunn., *Proc. Linn. Soc. New South Wales* **59**: 169 (1934) non Vittad. (1831).
Cortinomyces luteus (Massee) Bougher & Castellano, *Mycologia* **85**: 277 (1993).
Hysterangium atratum Rodway, *Pap. & Proc. Roy. Soc. Tasmania* **1919**: 112 (1920).
Hymenogaster atratus (Rodway) Zeller & C.W.Dodge, in C.W.Dodge & Zeller, *Ann. Missouri Bot. Gard.* **21**: 656 (1934).
H. effodiendus G.Cunn., *Trans. Roy. Soc. South Australia* **75**: 14 (1952) [new synonym].
C. effodiendus (G.Cunn.) Bougher & Castellano, *Mycologia* **85**: 279 (1993).

Following Bougher & Castellano (1993), *Hysterangium atratum* is accepted as a synonym of *P. luteum*, which species is distinguished from *P. viscidum* by its less elongate spores. Bougher & Castellano (1993) note that there is a 'very close similarity' of microscopic characters between *Hymenogaster effodiendus* (known only from the type from Glenelg R., Victoria) and *P. luteum*, but choose to keep the two species separate pending the availability of further collections.

The sole distinguishing character which Bougher & Castellano (1993) use to justify the recognition of *H. effodiendus* is the 'bright yellow peridium when young' in contrast to the peridium of *P. luteum* which they describe as 'copper red becoming dark brown'. In fact, Cunningham (1952) gives the colour of *H. effodiendus* as 'when fresh bright yellow, drying reddish brown', and in the original description of *P. luteum*, Massee (1891) mentions that the subterrancan portion of the peridium is yellowish whilst the exposed portion is orange.

Four collections of *P. luteum* at MEL all have the distinctive subglobose to broadly ellipsoid spores [9.5–13 × 8–9(–10) µm, Q = 1.05–1.33(–1.44)] described by Bougher & Castellano (1993) for that species. Amongst these collections, one (*T.W. May M352 & B.A. Fuhrer*) when fresh had the upper peridium reddish brown (2.5YR 3/6, 4/6, 5/6) and the lower peridium yellow (2.5Y 7/6–8/8), but is more or less uniformly yellow after freeze drying. In an air dried collection (*G. Beaton s.n.*) both yellow and reddish brown colours are present in dried material. Another collection (*T.W. May 1065 & B.A. Fuhrer*) is yellow in a photo of fresh material, and after air drying is orange brown. Collections of *P. luteum* thus show a range of combinations of yellow and reddish brown colours, presumably related to age and degree of exposure of the peridium, and to the method of preservation. *Hymenogaster effodiendus* has peridium colours which fall within this range, and given that its micro-characters are identical to those of *P. lutuem* (Bougher & Castellano, 1993), there is insufficient hiatus to warrant its recognition.

Collections Examined

Victoria — **Victorian Volcanic Plain Region**: side track off Elbow Ford Rd., 2.9 km N Portland-Nelson Rd., 24 June 1991, *T.W. May 1065 & B.A. Fuhrer* (MEL); **Midlands Region**: side track off Skipton Rd., 14 miles from Ballarat, 26 June 1964, *G. Beaton s.n.* [incorrectly determined by Beaton as *Hymenogaster viscidus*] (MEL 1053589); Lerderderg State Park, Blue Gum Track, 4.5 km S O'Briens Track, 23 July 1983, *T.W. May M-352 & B.A. Fuhrer* (MEL); **Gippsland Plain Region**: Melbourne, Blackburn, Blackburn Lake, 1983, *T.W. May BL-49* (MEL).

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